

## ABSTRACT

Hot swappable pulse width modulation power supply circuits preferably realized in integrated circuit form. The hot swap circuits provide for de-bouncing, controlled charging of the input capacitor of the power supply circuit and soft-start of the pulse width modulator after charging the input capacitor. Other features include a low voltage lockout, and an output for coupling to a synchronous rectifier driver to synchronize synchronous rectifiers on the secondary side of a coupling transformer in isolated systems. The hot swap capability may be disabled through an enable pin, or not implemented by not connecting the integrated circuit in a manner to use the hot swap capability.